

Section V — Resource Conservation



This section contains the mandated Conservation and Open Space Elements. It deals with issues having a strong connection with the natural physical qualities of the City.



A. Conservation Element

The Conservation Element provides “*for the conservation, development and utilization of natural resources including water, ... soils, rivers and other waters, harbors, fisheries, wildlife, minerals, and other natural resources.*” (Government Code Section 65302.(d).) This Conservation Element also contains goals and policies relating to air quality, water quality and quantity and energy. The hydraulic force of river waters is addressed in the Public Safety Element in the Growth Management section. Soil conservation is discussed in the Air Quality section of this Element and the Agricultural Preservation section of the Open Space Element. Natural resource conservation is addressed in both this Element and the Open Space Element.

Each subsection in this Element lists goals, policies and recommendations for implementation. Goals describe a desired state of affairs for the future. They are broad public purposes toward which policies and programs are directed. Policies are statements of government intent against which individual actions on decisions are evaluated. Recommendations for implementation propose specific actions which Riverside may choose to take in achieving the goals of the General Plan.

1. Air Quality

Location and Climate

The City of Riverside is located in the eastern portion of the South Coast Air Basin (SCAB). The basin also includes all of Orange, Los Angeles, and Riverside Counties and the non-desert portion of San Bernardino County. The climate of the SCAB is influenced by its location in a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean on the southwest and high mountains around the rest of its perimeter.

Air quality is the balance of the natural dispersal capacity of the atmosphere and emissions of air pollutants from human activity. Ventilation, or natural replacement of air, directly affects atmospheric dispersal capacity. Temperature inversions and low wind speeds often reduce ventilation in the Riverside area. The hills rimming the basin sometimes act as a trap, preventing horizontal movement of air into and out of the basin. Particularly under summer and autumn inversion conditions, pollutants may become trapped in the basin due to poor ventilation. In winter, shallower radiation inversions may promote the accumulation of pollutants in the morning, but midday heating usually initiates vertical air currents, resulting in improved air quality (South Coast Air Quality Management District, 1987).

The SCAB is a non-attainment area for four of the six criteria pollutants, including ozone (O₃), carbon monoxide (CO), nitrogen dioxide (NO₂), and fine particulate matter (PM₁₀). Non-attainment means that these pollutants exceed federal ambient air quality standards. With the passage of the California Clean Air Act (AB 2595), the SCAB is also a non-attainment area for these pollutants with respect to the more



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stringent State of California standards. The SCAB is considered to have the worst air quality problem of any basin in the nation (Southern California Association of Governments, 1989).

The emissions inventory for 1987, compiled by the California Air Resources Board (CARB), shows that Riverside County contributed less than half of the amount of O₃ precursor gases, such as Total Organic Gases and NO₂, emitted by either Los Angeles or Orange Counties. Yet, annual mean O₃ concentrations measured in Riverside County in 1987 were greater than in either Los Angeles or Orange Counties. Clearly, Riverside County is a “transport area” receptor and receives emissions generated from other areas due to prevailing meteorological and topographical conditions.

Air quality in the Riverside area is monitored in the Community of Rubidoux, three miles to the west of Downtown Riverside, by the South Coast Air Quality Management District (SCAQMD). Data from this station (see Appendix C, Table 2 (*Under Separate Cover.*)) indicates that the primary pollutants of concern within the immediate area of the city are O₃ and particulates. However, as a city within the boundaries of the SCAB, an effort must be made to reduce the emission of all non-attainment pollutants within the basin.

While meteorological and topographical conditions create a setting conducive to the accumulation of pollutants, these natural factors are not subject to change or manipulation via policy. However, by addressing other contributing factors, such as rapid population growth and inadequate air pollution control measures, the City can reduce pollutant emissions.

Pollutants of Concern

O₃ is a photochemical product of other emissions and is not directly emitted into the atmosphere. Gasses responsible for O₃ formation include reactive organic gasses (ROG), such as hydrocarbons, and oxides of nitrogen. O₃ is a colorless toxic gas which is produced with the aid of ultraviolet radiation from the sun. Excessive O₃ concentrations can cause such effects as damage to vegetation and cracking of untreated rubber. O₃ may also directly affect the lungs, causing respiratory irritation and potential changes in lung functions. In the Riverside area, mobile sources, particularly motor vehicle emissions, are primarily responsible for the emission of O₃ precursors.

Particulates are accumulations of finely divided solids or liquids; commonly including dust, soot, or aerosols. Ten percent of all particulates are 10 microns or less in diameter (PM₁₀) and can remain suspended in the atmosphere for significant periods of time. PM₁₀ may affect human health by damaging the lung tissue, or by containing harmful absorbed gasses. Suspended particulates can scatter or absorb sunlight, and thus reduce visibility and create haze. Predominant sources of PM₁₀ in Riverside County include entrained road dust, construction activities, agriculture, and natural sources such as wind-raised dust.



CO is a colorless, odorless, toxic gas produced by incomplete combustion. Winter inversion conditions usually contribute to concentrations in excess of state and federal standards. Motor vehicles are the major source of this contaminant in the basin. Inhaled CO passes into the blood stream, where it reduces the amount of oxygen available for proper functioning.

Nitrogen oxides are primarily associated with fuel combustion. Concentrations of nitrogen oxides in excess of state or federal standards have not been measured in the Riverside area (see Appendix C-5 (*Under Separate Cover.*)).

Responsible Agencies

SCAQMD is the regional agency responsible for enforcing air quality standards within the SCAB. The applicable air quality criteria for the City of Riverside are the State of California Ambient Air Quality Standards (CAAQS) and the National Ambient Air Quality Standards (NAAQS). These two standards are detailed in Appendix C-4 (*Under Separate Cover.*). The standards have been developed to protect the public from various known undesirable effects upon health, vegetation and property.

The Southern California Association of Governments (SCAG), together with SCAQMD, has adopted an Air Quality Management Plan (AQMP) to reduce pollutant emissions within the South Coast Air Basin. This plan requires that local governments adopt a series of policies in an effort to achieve emission reductions and basin-wide attainment of air quality standards.

Key Air Quality Issues

Transportation. In order to reduce emissions of CO and emissions associated with the production of O₃, trip generation must be reduced, traffic flow must be improved using Transportation Demand Management strategies, and the use of alternative fuels as well as alternative means of transportation, such as bicycling must be encouraged. Trip generation can be reduced by the implementation of telecommuting and alternate work week strategies by large employers. Traffic flow improvements can be made by the signalization of intersections, the diversion of truck travel during peak period traffic flow, and the implementation of incentives to promote the use of ride-sharing and mass transit. Vehicles that run on alternative fuels can be procured by private and public agencies with substantial fleets, including the City of Riverside. Some transportation policies affecting air quality are included in this portion of the Conservation Element, while many others are found in the Transportation Element.

Land Use. Expanding development, widely separated land uses, and a housing-rich community all serve to increase the total number of vehicles and vehicle miles travelled. In order to meet currently non-attained air quality standards, measures need to be taken to reverse this trend. The number of persons commuting out of the Riverside area can be reduced by the stimulation of job growth within the City. The



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preservation of open space within the City can moderate the growth that adds to the number of vehicles on local roadways. Additionally, whenever possible, large-scale industrial sources of air pollution should be separated from sensitive receptors such as nursing homes and schools. Most land use policies are contained in the Land Use Element, although some policies that are directly supportive of improved air quality are found in this Element.

Particulate Emissions. The City of Riverside is a non-attainment area for fine particulate matter (PM₁₀). The major sources of particulate matter within the city are road dust, farming operations, construction and demolition activities, and natural sources, primarily wind-raised dust. Particulate emissions can be reduced by the paving of unpaved roads and parking lots, and by the implementation of fugitive dust prevention measures during farming and construction activities.

Energy and Conservation. Airborne pollutants may be reduced through residential and commercial energy conservation efforts, as well as conservation efforts by the City of Riverside. The promotion of waste recycling can reduce the amount of airborne pollutants generated by landfills. Policies regarding these issues are found in the Energy section of the Conservation Element and in the Solid and Hazardous Waste Management section of the Land Use Element.

Governmental Organization. Air quality is a regional issue. Improving air quality will require the concerted efforts of many regulatory agencies within the region. Coordination of local plans and programs with intergovernmental agencies such as SCAQMD and SCAG will promote the efficient attainment of air quality standards.

Air Quality Goals and Policies

Goal AQ 1 To achieve air quality levels that provide a safe and healthy environment for all residents and businesses within the City of Riverside consistent with the target dates established by the State and Federal Clean Air Acts.

Policy AQ 1.1 The City should pursue cost effective air quality management strategies that contribute to improved local and regional air quality.

Goal AQ 2 To reduce automobile pollutant emissions by reducing the percentage of people within the City of Riverside who must drive to work on a daily basis (person work trips).

Policy AQ 2.1 The City should support the implementation of, and legislation pertaining to, alternate work weeks and telecommuting strategies by employers within the City of Riverside and throughout Southern California. Telecommuting is a process by which employees are able to work at home or at local



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employment centers via telephone and computer linkages with a distant work location. Alternate work weeks would allow employees to work their regular number of hours in fewer days (i.e. forty hours in four days), thus, requiring fewer person work trips.

Policy AQ 2.2 The City should support legislation to remove impediments to alternate work schedules in management bargaining agreements.

Policy AQ 2.3 To support telecommuting, the City should encourage the consideration of conversion of surplus public facility sites as potential locations for neighborhood work centers when analyzing alternative uses of such facilities. Notification of this policy should be given to relevant agencies, such as school districts.

Policy AQ 2.4 The City should continue and expand its programs providing alternate work weeks, flextime, and telecommuting for employees of the City of Riverside. The City shall take an active leadership role in implementing the transportation demand management strategies it encourages local employers to adopt.

Policy AQ 2.5 The City shall, when appropriate, condition development approvals on the development of transportation demand management strategies.

Policy AQ 2.6 The City should report, in a quantitative manner, the effectiveness of trip reduction action strategies to SCAG on an annual basis.

Goal AQ 3 To reduce automobile pollutant emissions by reducing the number of vehicles required by residents within the City of Riverside for travel to and from work on a regular basis (vehicle work trips).

Policy AQ 3.1 The City shall support the Air Quality Management District's implementation of its Regulation 1501.

Policy AQ 3.2 The City should give priority to the development of trip reduction programs and development of ride-sharing facilities over mixed flow highway capacity expansion, in order to achieve and maintain mobility and air quality.



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Policy AQ 3.3 The City should support the enhancement of mass transit performance and availability. Establishment of developer fees to offset transit development costs should be considered by the City. Such fees should provide incentives for locating development near mass transit stations or creating mixed use developments. Encourage the creation of non-polluting mass transit.

Policy AQ 3.4 The City should continue to implement its Bikeway Master Plan with the goal of having major north/south and east/west corridors in and around the City in order to accommodate bicycle commuters.

Goal AQ 4 To reduce the number of single-occupant non-work auto trips within the City of Riverside.

Policy AQ 4.1 The City should support merchant transportation incentives, which would require large retail establishments to offer customer ride-sharing incentives and require owners/managers/developers of both new and existing large retail establishments to provide facilities for non-motorized transportation needs.

Policy AQ 4.2 The City should require that the development of any new special event center with capacity in excess of 10,000 people include facilities for off-site facility lots, Park-n-Ride programs and incentives for mass transit use, including the sale of discounted transit passes with ticket purchases.

Goal AQ 5 To reduce vehicular emissions in the City of Riverside through traffic flow improvements.

Policy AQ 5.1 The City should encourage a more efficient use of the road system through the diversion of truck traffic, whenever feasible, to off-peak periods.

Policy AQ 5.2 The City should give priority to efforts to improve the flow of traffic through facility design techniques such as the location of signalized intersections, the timing of signals, and the construction of additional turn and deceleration lanes.



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Goal AQ 6 To reduce tailpipe emissions from City fleet vehicles.

- Policy AQ 6.1* The City should support legislation which encourages the use and ownership of electric or other alternative energy vehicles.
- Policy AQ 6.2* The City should support legislation promoting research, development, and demonstration of electric and other alternate energy vehicles in both fleet service and private passenger use.
- Policy AQ 6.3* The City should consider the phased conversion of its fleet of vehicles to electric or other alternative energy fuels.

Goal AQ 7 To reduce the length of work trips while expanding the supply of affordable housing and creating an urban form that efficiently utilizes urban infrastructure and services.

- Policy AQ 7.1* The City shall strive to achieve a job/housing balance compatible with the Regional Growth Management Plan through the provision of incentives to attract job growth within the City of Riverside.
- Policy AQ 7.2* The City should encourage the development of employment through support of labor force retraining programs and other economic development measures.
- Policy AQ 7.3* The City shall promote future patterns of urban development and land use which reduce costs of infrastructure construction, make better use of existing facilities, and achieve a good match between future growth and the phasing-in of new facilities or expansion of existing ones. This includes mixed use development involving retail uses, condominiums, senior housing units, and parking.
- Policy AQ 7.4* The City should encourage growth in and around activity centers, transportation nodes and corridors, areas with underutilized infrastructure systems, and areas needing redevelopment.

Goal AQ 8 To separate air pollution sensitive land uses from major sources of air pollution.

- Policy AQ 8.1* The City should adopt regulatory techniques designed to separate air pollution sensitive land uses (i.e. retirement homes, hospitals, schools and residences) from significant sources of air pollution.



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Goal AQ 9 To reduce particulate emissions from paved and unpaved roads, construction activities, and agriculture.

Policy AQ 9.1 The City shall evaluate, expand and vigorously enforce guidelines to be followed by all contractors for the prevention of fugitive dust at construction sites.

Policy AQ 9.2 The City shall support the paving of unpaved roads and parking lots in areas undergoing transition from a rural to an urban or suburban character.

Policy AQ 9.3 The City should adopt regulatory techniques to minimize the generation of fugitive dust resulting from agricultural activities. Such techniques may include vegetative cover, wind-breaks, improved tillage practices, and other means.

Policy AQ 9.4 The City shall encourage the use of building materials and methods that minimize the emission of reactive organic gasses (ROG) and particulates.

Goal AQ 10 To coordinate City air quality planning and implementation efforts with other responsible agencies.

Policy AQ 10.1 The City shall coordinate with the County of Riverside, the Western Riverside Council of Governments, SCAQMD, SCAG, the California Air Resources Board (CARB) and other agencies involved in decisions affecting air quality to develop and implement clean air strategies for the South Coast Air Basin.

Policy AQ 10.2 Coordinate the City's efforts in improving air quality with the County of Riverside and Western Riverside Council of Governments.

Goal AQ 11 To coordinate with regional authorities and also to take primary responsibility for standards and measures to protect citizens of the city by keeping abreast of ongoing information of the health effects of air pollutants generated within the City and incorporate that data in its regulatory process.

Policy AQ 11.1 The City shall annually review the Health Risk Reports and Emission Summary prepared by industrial facilities located in the City of Riverside in compliance with State and Federal laws.



Recommendations for Implementation - Air Quality (AQ)

I-AQ 1: The City should collect work trip information from all business license applicants or holders of business licenses. The required information shall include, but not be limited to, numbers of employees, how they commute to work, work trip lengths and, where applicable, types and number of company vehicles and delivery of goods schedules. In addition, information shall be provided to business license applicants or holders about ridesharing and other programs to reduce employment related vehicle trips.

I-AQ 2: For any new office development in excess of 25,000 square feet that includes video conferencing facilities as part of their development, credit should be given in the form of density bonuses or reduction of fees on plans or developer fees.

The City should adopt a schedule equating benefits with the type and amount of credit to be granted by the City.

I-AQ 3: The City in conjunction with local businesses, should study the feasibility of centralized ordering and home delivery services.

Such services would reduce trip generation for the purchase of common household goods. This strategy would require the use of mass mailing or other public announcement in order to find businesses willing and capable of home delivery services.

I-AQ 4: Modify any regulations that would unnecessarily restrict the use of a home as an office for home based telecommuting.

I-AQ 5: Adopt an ordinance by July 1, 1999 requiring employers with multiple facilities to set aside facilities to be used by telecommuting employees.

This strategy is a long-term goal of the AQMP to allow employers time to plan for the increased future need of facilities.

I-AQ 6: The City shall continue to comply with SCAQMD Regulation 1501 including required monitoring and reporting responsibilities. Through any combination of ridesharing, telecommuting, alternative work weeks and trip reduction incentives, the City shall strive for a target of a thirty percent reduction of City employee work trips by 2010.

I-AQ 7: The City will assist SCAQMD in implementing its Regulation 1501 by promoting the establishment of transportation management associations for facilities employing more than one-hundred employees.



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- I-AQ 8:* The City should provide the SCAQMD the information gathered from the registration program outlined in *AQ 1* to assist the SCAQMD in implementing Regulation XV.
- I-AQ 9:* Adopt an ordinance pursuant to future SCAQMD rules prohibiting one-hundred percent employer-subsidized parking.
- I-AQ 10:* Minimize free parking for non-residential development pursuant to future SCAQMD rules. Apply public revenues from increased parking fees to transit fares as a subsidy.
- I-AQ 11:* Require major retail centers to offer customer travel incentives for alternatives to single-occupant vehicles and to provide facilities for non-motorized transportation needs such as bike racks and pathway systems.

Examples of customer travel incentives would be to offer an exchange of a valid purchase receipt for ten dollars or more for a free bus token on the day of purchase, or a sale price for customers showing validated bus tickets or passes.

- I-AQ 12:* Require any development of a special event center with a potential occupancy of 10,000 or more persons at one place and one time to establish Park-n-Ride facilities or off-site parking at remote locations.
- I-AQ 13:* Implement a system of designated bikeways within the city on non-major streets that connect residential areas with shopping centers and parks. Upon completion, establish a high visibility campaign to promote awareness and encourage bicycle use.
- I-AQ 14:* The City should coordinate development approvals with efforts to encourage the expansion and creation of non-polluting mass transit systems and intermodal means of transportation to serve the proposed developments. City approval of any development should be conditioned upon the provision of adequate facilities to accommodate the anticipated mass transit demands of the proposed development. These facilities may consist of dedications of land and/or construction of facilities.
- I-AQ 15:* The City shall require by ordinance that new developments which will employ one-hundred or more workers to provide for City approval, a trip reduction plan using activities such as ridesharing, telecommuting, alternative work schedules, and other similar contributory activities to reduce the total quantity of work trips by six and a half percent increasing to twenty percent by the Year 2000 and to thirty percent by the Year 2006.



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I-AQ 16: Continue to monitor traffic flow along collector and arterial streets and make the necessary adjustments to signals and roadways to improve the flow of traffic.

I-AQ 17: Prohibit on-street parking on collector and arterial streets during commute hours where the level of service had dropped below Level E.

I-AQ 18: Commit to a phasing plan to incorporate low, ultra-low and zero emissions vehicles into the city government fleet as required by the adopted 1994 SCAQMP Air Quality Management Plan. Annual monitoring reports on progress made toward meeting the objective should be submitted to SCAG.

I-AQ 19: Establish a review process within a one-half mile radius of any sensitive receptor, of any commercial or industrial development that has the potential for toxic air emissions.

I-AQ 20: Adopt an ordinance requiring the following measures be taken by contractors at construction sites.

- The use of truck wheel washers at the roadway exits from construction sites.
- Paving of an access road onto the construction site.
- Cleaning of access and public roadways of soil originating from the project site.
- Paving, curbing, or vegetative stabilization of road shoulders on which vehicles could potentially drive and create nuisance particulate emissions.
- Submittal of and adherence to a strict watering schedule of total coverage of unpaved construction areas twice daily. Require that grading activities be suspended during periods of excessive winds above thirty miles per hour.
- Use low emission mobile construction equipment where feasible.
- For developments exceeding the threshold of significance, develop trip reduction plans for construction employees.
- Spread soils binders, unpaved roads and unpaved parking areas.
- Apply AQMD approved chemical soil stabilizers according to manufacturers specifications to all inactive construction sites



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(previously graded areas which remain inactive for more than ninety-six hours).

- Reestablish ground cover on construction sites through seeding and watering.
- Implement or contribute to an urban tree planting program to off-set the loss of existing trees at the construction site if applicable.
- Reduce traffic speeds on all unpaved surfaces to fifteen miles per hour or less.
- Configure construction parking to minimize traffic interference.
- Minimize obstruction of through traffic lanes.

I-AQ 21: Adopt an ordinance requiring parties involved with large scale agriculture of three or more acres, to implement fugitive dust control measures.

These measures include the use of either windbreaks, soil stabilization, asphalt cover, or closer crop spacing. Unpaved farm roads should be required to be stabilized using wet suppression and/or chemical or physical stabilization.

I-AQ 22: Adopt building regulations, in conjunction with determinations to be made by SCAQMD, to prohibit the use of building methods and materials such as architectural coatings that emit excessive amounts of reactive organic gasses. These methods and materials are to be determined by research to be conducted by the SCAQMD so as not to sacrifice safety and durability.

I-AQ 23: Prepare annual air quality action strategy monitoring reports that identify all action strategies pursued by the City and evaluate their effectiveness. A copy of these reports should be forwarded to SCAG and SCAQMD.

I-AQ 24: Require all Environmental Impact Reports for developments within the City to include an air quality section that addresses current basin attainment status and projected impacts quantified through the URBEMIS, CALINE4, or other air quality models available to CARB.

I-AQ 25: The City shall commit to updating the Air Quality section of the General Plan consistent with future amendments to the AQMP.



- I-AQ 26:* The City shall investigate the adoption of programs at least as stringent as those developed by the SCAQMD relative to the indirect source control measures as listed in the 1994 AQMP.
- I-AQ 27:* Create a City program to annually review the Health Risk Reports and Emission Summary prepared by industrial facilities in the City of Riverside in compliance with State and Federal law and to address the problems these reviews reveal, including action to protect sensitive receptors. This program should include cooperation with the South Coast Air Quality Management District and the State Air Resources Board.
- I-AQ 28:* The City shall consider requiring large employment centers to provide facilities such as bicycle lockers and showers to encourage bicycle commuters.

2. *Water Quantity and Quality*

The quantity and quality of surface water and groundwater in Riverside have a significant effect on the quality of life in the area. Water resources are essential for domestic use and irrigation, and are also an invaluable recreational and aesthetic resource. While most natural water courses in Riverside tend to be intermittent and have limited water surface, they form a network of riparian habitat which is essential to the maintenance of many local species of plants and animals.

The City is located in the 2,000 square mile watershed drained by the Santa Ana River. Groundwater quality is an important concern to the City, since the Riverside Public Utilities Department relies on wells for most of its water supply. While most of the groundwater is of high quality, concentrations of nitrate, the pesticide DBCP and dissolved solids have been identified in some areas. Since water is a finite resource, local water resources should be managed to protect the adequacy of supplies, to limit the dependence on external sources of supply, and to avoid the overdrafting of the underground water basin to reduce land subsidence. Because aquifers and surface water resources do not stop at municipal borders, the strategies for accomplishing these resource and environmental objectives must have a regional focus.

In California, water quality and water rights issues are managed by the State Water Resources Control Board and by the California Water Quality Control Board - Santa Ana Region (RWQCB-8). The Water Quality Control Board is authorized to adopt regional water quality control plans, enforce waste discharge requirements for point or non-point sources established by the State or the Federal Water Pollution Control Act, and to control groundwater pollution through groundwater waste discharge requirements and well permitting. The City will work with the Water Quality Control Board in order to protect the environmental quality of surface and groundwater resources.



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Key Water Quantity and Quality Issues

Quantity. Though located in a semi-arid climatic zone, Riverside has historically enjoyed ample local water supply for both agricultural and domestic use. Continued careful management of this local source is necessary to avoid reliance on scarce, costly and undependable imported water.

Quality. Riverside has historically had high quality water, but increasing urbanization within the water basin threatens that quality through potential intrusion of pollutants into the groundwater supply. Proper planning is necessary to help protect water quality in the future.

Regional Responsibility. Water from sources in Riverside is part of the supply for downstream consumers in the Santa Ana River Basin. The City should help protect the amount and quality of water available to these water users.

Water Quantity and Quality Goals and Policies

Goal WQ 1 To preserve the quantity and quality of all water resources throughout the General Plan Area.

- Policy WQ 1.1* The City should adopt design and construction standards for new development that protect water quality, minimize erosion and sedimentation, and preserve natural drainage, habitat, and aesthetic functions. Standards should address runoff flow rates and the type, quality and quantity of particulates carried by runoff.
- Policy WQ 1.2* Water resources should be utilized in a manner that does not deplete the supply of groundwater; efforts to conserve local and imported water supplies should be encouraged.
- Policy WQ 1.3* The City should protect aquifer recharge features and areas of important aquifers from degradation of water quality and reduction of recharge.
- Policy WQ 1.4* The City should monitor the quality and quantity of groundwater and surface water resources and consider revisions to the General Plan's policies if monitoring identifies significant reductions in water quality or quantity.
- Policy WQ 1.5* The City should coordinate its plans, regulations and programs with those of other public and private entities which affect the consumption and quality of water resources within the General Plan Area. These entities include water providers (the Western Municipal Water District, the Eastern Municipal



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Water District, and the El Sobrante Water District), Riverside County, and appropriate cities.

- Policy WQ 1.6* The City shall work with the RWQCB-8 in the formulation of water quality runoff standards and implementation programs to achieve those standards.
- Policy WQ 1.7* The City should develop procedures for cooperating with Riverside and San Bernardino Counties and with adjacent municipalities in the review and approval of new developments which affect the quality and quantity of basin-wide groundwater and surface water resources.
- Policy WQ 1.8* The City shall consider subsidy programs as included in the General Plan, especially for the conservation of agriculture, relative to the provision of electricity and water, to be applied on a case by case basis.

Recommendations for Implementation - Water Quality (WQ)

- I-WQ 1:* Adopt, in coordination with RWQCB-8, regulations establishing standards for the quality of runoff from new development sites and listing best management practices for achieving those standards.
- I-WQ 2:* Continue to monitor water levels and water quality of all City-owned wells and review results of monitoring to identify significant changes in water quality or quantity.
- I-WQ 3:* Adopt regulations establishing standards for the protection of recharge features.
- I-WQ 4:* Coordinate with RWQCB-8 to ensure that the City's stormwater management system complies with EPA standards.
- I-WQ 5:* Coordinate with water providers, such as the Western Municipal Water District, Eastern Municipal Water District and the El Sobrante Water District, to ensure the continued availability of a safe and abundant water supply.

3. Natural Resources

The General Plan is premised on the recognition that natural resources are not inexhaustible commodities to be exploited, but instead are valuable assets that should be carefully used and wisely managed. The City's natural resources include landforms such as hillsides and arroyos, mineral deposits and biological resources. Biological resources are important to preserve species diversity, the vitality of the



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particular ecosystems in which they live and the maintenance of ecological balance in the City's natural areas. Natural resource policies also support other goals of the General Plan, such as preventing urban sprawl, protecting water and air quality, and preserving agricultural lands.

Land resources within the City include hillsides and arroyos, canyons, and stream and riverbeds, as well as the Santa Ana River corridor. Protecting land resources is necessary to maintain the unique character of Riverside, preserve public open space, and protect the public health, safety and welfare. Areas of generally steep slopes (fifteen percent or greater) include the Box Springs Mountain area, Alessandro Heights, portions of Rancho El Sobrante, and Norco Hills. Exhibit 4 (Page III - 5) shows those areas with slopes of fifteen percent or more. Development on these steep slopes can be hazardous due to soil instability and the potential for land failure due to inappropriate grading or construction techniques. Development within drainage ways intensifies non-point source pollution of receiving waters and increases the likelihood of flood damage to buildings.

Historically, the quarrying of granitic rock was a significant industry in Riverside. These operations have not been active for decades and most sites are now close to urbanized areas. Exhibit 40 (Page V - 19) illustrates the mineral resource locations within the General Plan Area. While there are no zones classified by the State as SZ (scientific zone) the exhibit identifies an area classified as a mineral resource zone (MRZ-2), as well as scattered areas where feldspar, silica, limestone and other rock products may be found. However, mineral extraction plays no role in the community at this time and is not anticipated to do so in the future.

Biological resources include native vegetation such as the inland sage scrub and riparian areas as well as rare, threatened or endangered plant or animal species. *Dipodomys stephensi* (Stephens' Kangaroo Rat) is listed as an Endangered Species by the Federal Government; its habitat includes areas in and around Sycamore Canyon Park and in Alessandro Heights. Exhibit 8 (Page III - 10) lists sensitive species that may exist within the General Plan Area. Preservation of these species depends on the preservation of natural habitats, including the inland sage scrub, vernal pool and riparian communities. Both the size of individual habitat areas and the connectivity between these areas can directly affect the ability of these habitats to support viable populations of sensitive species. Therefore, effective habitat preservation relies on a coordinated, comprehensive and carefully monitored regulatory approach.



Exhibit 40: Mineral Resources



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Key Natural Resource Issues

Natural Landforms and Features. Riverside's unique natural geography provides the City with much of its unique character. Preservation of significant blocks of various types of natural open space is a high priority.

Natural Habitat. Riverside, although located at the heart of a rapidly urbanizing region, has the opportunity to preserve significant areas of natural habitat which are home to a number of interesting, threatened, rare and/or endangered plant and animal species.

Natural Resource Goals and Policies

Goal NR 1 To preserve and protect ridgelines, hillsides, arroyos, the Santa Ana River corridor, and other significant natural features.

- Policy NR 1.1* The City shall limit the extent and intensity of uses and development in unstable soil areas, areas of steep terrain, floodplains, arroyos and other critical environmental or hazardous areas.
- Policy NR 1.2* The City shall control the grading of land to minimize the potential for erosion, landsliding, and other forms of land failure as well as to limit the negative aesthetic impact of excessive modification on natural landforms.
- Policy NR 1.3* The General Plan's land use designations and community design policies should recognize the value of ridgelines, hillsides and arroyos as significant natural and visual resources and should strengthen their role as features which define the character of the City and its individual neighborhoods.
- Policy NR 1.4* Development of property with an average natural slope of at least fifteen percent and not more than thirty percent shall not exceed 0.63 dwelling units per acre (one unit per one and two thirds acres). Development of property with an average natural slope exceeding thirty percent shall not exceed 0.2 dwelling units per acre (one unit per five acres). These densities shall be reflected in the land use designations of the General Plan Land Use Diagram (*Located in the Map Pocket of this Document*) for the General Plan Area. Within the incorporated City, these densities should be reflected in the City's development regulations and policies.



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Policy NR 1.5 The City shall support maintenance of the existing open space character of Riverside's hillside and arroyo areas through its development regulations and policies.

Policy NR 1.6 The City should use design guidelines and development regulations affecting building height, spacing of structures, and the preservation or use of native plants in landscaping, to retain ridgeline areas in their natural state, to the greatest extent feasible.

Policy NR 1.7 The alignment studies and design standards used in constructing roadways included in the Transportation Element, and for local or neighborhood streets, shall minimize the roadways' effects on natural resources by following existing topography, minimizing the height of cut-and-fill slopes, and using other design techniques to reduce the visual impacts of roadways and associated traffic on the natural terrain.

Goal NR 2 To protect the biotic communities and critical habitats for endangered species throughout the General Plan Area.

Policy NR 2.1 The City should design its plans, policies and implementation techniques to protect key wildlife habitats, habitats of rare, threatened, or endangered species, wetlands and other significant environmentally sensitive areas.

Policy NR 2.2 Exhibit 9 (Page III - 12) shows the generalized locations of rare and endangered species habitat identified on the date of Plan adoption. This diagram shall be used by the City to identify areas for which more specific habitat analysis will be necessary as part of the development review process. The City shall update this diagram as more detailed habitat information is developed. The City may require habitat analysis for proposed developments in areas of potential habitat for other species listed in Exhibit 8 (Page III - 10), even though such habitat is not mapped in Exhibit 9 (Page III - 12). Site specific review may be required because the habitats for the sensitive species listed in Exhibit 8 (Page III - 10) range from pristine to disturbed areas.

Policy NR 2.3 The City shall consider requiring development projects in areas identified in Exhibit 9 (Page III - 12) to undergo review to assess their impact on habitats of rare, threatened or endangered species. This review of habitat impacts should be conducted as part of the project's environmental review. Developers of projects found to have potential impacts on



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sensitive species may be required to mitigate the impacts of proposed habitat changes.

Policy NR 2.4 The City shall cooperate with the County, State and Federal governments to protect the Stephens' Kangaroo Rat (SKR) by complying with the terms of the adopted short-term SKR Habitat Conservation Plan, including provisions for development regulations, mitigation fees, and the acquisition and operation of Sycamore Canyon Wilderness Park as an SKR reserve. The City shall encourage land donations or the dedication of land in lieu of park fees for the acquisition of additional portions of Sycamore Canyon as part of the park.

Policy NR 2.5 The City should participate with the County, State, and Federal Governments in developing and implementing both a long-term Habitat Conservation Plan for the Stephens' Kangaroo Rat and a county-wide multi-species Habitat Conservation Plan.

Policy NR 2.6 The City shall endeavor to protect native plant communities in the General Plan Area, including the inland sage scrub, riparian and vernal pool habitats.

Policy NR 2.7 The City should protect and enhance known wildlife migratory corridors and help create new corridors whenever possible.

Policy NR 2.8 The City should establish programs to identify, map and monitor the habitat for sensitive species listed in Exhibit 8 (Page III - 10), or for other species added to the State or Federal listings of rare, threatened or endangered species.

Recommendations for Implementation - Natural Resources (NR)

I-NR 1: Continue to refine regulations limiting the development of areas with unstable soils, steep terrain, floodplains, arroyos and other critical environmental and hazardous areas.

I-NR 2: Develop regulations establishing grading standards to ensure soil stability and to minimize negative aesthetic impacts.

I-NR 3: Modify the subdivision and zoning regulations to expand the use of design review and design guidelines to regulate building height, building spacing, landscaping, grading and street alignment to retain ridgeline areas in their natural state to the greatest extent possible.



- I-NR 4:* Require developments which include property identified as potential habitat for the rare or endangered species listed in Exhibit 8 (Page III - 10) to submit site-specific analysis of the effect of the proposed development on the affected rare or endangered species and to propose strategies for minimizing those effects.
- I-NR 5:* Continue active participation in Federal, State and local efforts to preserve rare, threatened and endangered species in the General Plan Area.
- I-NR 6:* Require site specific biological assessment and appropriate mitigation measures for all developments of property containing native plant communities and other potential habitats for sensitive species listed in Exhibit 8 (Page III - 10).
- I-NR 7:* Implement a program of research and field work to identify and map areas of habitat for sensitive species. Revise Exhibit 9 (Page III - 12) to reflect the results of this analysis. Periodically review and update this habitat information.

4. *Energy*

Adequate and affordable energy is critical to the overall quality of life and economic growth of the City of Riverside. Energy sources are used for transportation, lighting, space heating and cooling and the operation of machinery and appliances. Energy policies relate both to energy supply and to the amount and type of energy that City residents and businesses consume. The City's ability to affect energy supply is limited primarily to electricity supplied by the Public Utilities Department. The consumption of energy can be regulated effectively through vehicular trip reduction incentives (such as mixed use zoning and increased densities) in areas where public transportation is available, and through the establishment of energy-efficient construction requirements.

Because of the importance of energy to the quality of life and economic health of the community, energy consumption should be managed in an imaginative and prudent fashion. Critical factors affecting the supply and consumption of energy resources include the following:

- the reliability of energy delivery, including electricity and natural gas;
- the affordability of energy, especially electricity;
- ensuring equity among all energy customers while accommodating users with special needs;
- encouraging energy conservation and effective load management;



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- implementing environmentally sensitive procurement and distribution programs for local energy installations;
- coordinating energy policies among the relevant governmental entities;
- discouraging gasoline consumption by improving access to public transportation and by encouraging land development patterns that balance housing and jobs;
- ensuring a just and equitable rate-making process in order to achieve fairness among all customer classes, recognizing the effect of energy rate increases on low income customers; and
- utilizing the City's energy resources in order to promote economic development consistent with Riverside's "*Quality City*" goals.

Key Energy Issues

Supply. The City and other energy suppliers need to plan for the long-range development of the City in accordance with the General Plan goals and policies to assure that ample and reliable energy will be available to consumers when needed.

Conservation. Many sources of energy used in the Riverside area are non-renewable. The City and its neighbors need to maximize the efficient use of these resources in the immediate future and increasingly utilize renewable sources of energy, such as solar and wind energy.

Energy Goals and Policies

Goal E 1 To provide an adequate supply of affordable, environmentally sensitive energy resources for residents and businesses in Riverside.

Policy E 1.1 The City should support the development of non-polluting renewable energy sources through action by the Electric Utility to utilize such energy sources in a cost effective manner.

Policy E 1.2 The City should support the development of non-polluting renewable energy sources through the provision of appropriate land use designation and development regulation which encourages such energy production.

Policy E 1.3 The City should support the development of non-polluting renewable energy sources through activities such as public



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education efforts and the creation of local incentives for such development.

Policy E 1.4 The City should continue to provide a “lifeline” service rate to all residential electric customers of Riverside to provide basic services at a minimum cost.

Policy E 1.5 The City should manage the Electric Utility in a businesslike manner to provide electric service to the people of Riverside in a safe, reliable, environmentally sensitive and fiscally responsible way, while minimizing total utility costs over the long run.

Policy E 1.6 The City should, to the extent feasible, ensure the continued provision of ample, reliable energy to existing development and to new development at the time such development is approved by the City for occupancy.

Goal E 2 To encourage the efficient use of available energy resources by residential and commercial users.

Policy E 2.1 The Plan’s Land Use Diagram (*Located in the Map Pocket of this Document*) shall contain land use patterns which locate residential and non-residential uses in proximity to one another in a compatible manner to reduce energy consumption by reducing the need for automobile travel.

Policy E 2.2 The City shall encourage energy efficient development through its site plan and building design standards and guidelines.

Policy E 2.3 The City shall encourage the use of clean burning fuels and solar energy for space and water-heating purposes.

Policy E 2.4 The City shall encourage incorporation of energy conservation features in the design of all new construction and substantial rehabilitation projects, and encourage the installation of conservation devices in existing developments.

Policy E 2.5 The City shall encourage new construction and subdivision design that allows the use of solar energy systems. Enactment of a comprehensive solar access ordinance should be considered to ensure that existing and proposed buildings can use solar facilities.



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- Policy E 2.6* The City's landscaping guidelines should support the use of vegetation for shading, wind reduction and to otherwise manage the microclimate in new developments to reduce energy consumption.
- Policy E 2.7* The City shall encourage energy audits of existing structures to identify present levels of energy use and potential conservation measures.
- Policy E 2.8* The City should support the use of public transportation, bicycling, and other alternative transportation modes in order to reduce the consumption of non-renewable energy supplies.
- Policy E 2.9* The City's Electric Utility shall support public education programs for City residents and businesses, to provide information on energy conservation and on alternatives to the use of non-renewable energy sources.
- Policy E 2.10* The City should encourage private energy conservation programs that minimize high energy demand and that use alternative energy sources. Incentive implementation programs shall be encouraged from both public and private sources.

Goal E 3 To encourage the efficient use of available energy resources by the City of Riverside.

- Policy E 3.1* The City shall utilize the most energy-efficient design for local government facilities and equipment, consistent with a reasonable rate of return and the recognition of the environmental benefits from energy conservation.
- Policy E 3.2* The City shall evaluate and implement measures to improve energy efficiency in City operations, particularly in terms of energy consumption by the City vehicle fleet, efficient load management systems in City buildings, and regular energy audits of City facilities and operations.

Recommendations for Implementation - Energy

- I-E 1:* Reduce overall energy use by the City of Riverside by eight percent by 1994, fifteen percent by 2000, and thirty percent by 2010.

A particular emphasis should be placed on reducing energy use during peak demand hours. Reduction measures may include lighting improvements, modifications to heating, ventilation, and air conditioning



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(HVAC) units, conservation in waste water treatment, and any other methods seen to be effective.

- I-E 2:* Adopt an ordinance requiring the installation of solar heating equipment for water heating systems in all new multi-family developments, single-family homes over 2,000 square feet and for all new commercial buildings.
- I-E 3:* Adopt an ordinance requiring the installation of solar heating equipment for all new swimming pools with water heaters.
- I-E 4:* Install solar water heating systems at all appropriate City facilities.
- I-E 5:* Conduct a series of pilot projects to demonstrate use of renewable energy resources and to evaluate the potential cost effectiveness of expanded use of renewable energy sources in the City.
- I-E 6:* Develop and implement a Public Utility Demand Side Management (DSM) or other appropriate program that identifies cost-effective means of reducing energy consumption for businesses and residents, and provides strong incentives for conservation through the appropriate combination of development fees, rates and programs.
- I-E 7:* Adopt a solar access ordinance to prevent development on one site from precluding the use of solar energy on adjacent sites.
- I-E 8:* Employ the development review process to support the intelligent use of landscaping, site orientation and site design to reduce energy consumption.
- I-E 9:* Promote the use of energy efficient modes of transportation through public educational programs and through incentive programs for employees.
- I-E 10:* Conduct an energy audit of City operations including analysis of:
- the heating, cooling, lighting and water use of City buildings;
 - the operation of City vehicles; and
 - the modes of transportation used by City employees commuting to and from work.



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5. Open Space Element

The Open Space Element provides for:

“(1)... the preservation of natural resources including, but not limited to, areas required for the preservation of plant and animal life, including habitat for fish and wildlife species; areas required for ecologic and other scientific study purposes; rivers, streams, bays and estuaries; and coastal beaches lakeshores, banks of rivers and streams, and watershed lands.

(2)... the managed production of resources, including but not limited to, forest lands, rangeland, agricultural lands and areas of economic importance for the production of food or fiber; areas required for recharge of ground water basins; bays, estuaries, marshes, rivers and streams which are important for the management of commercial fisheries; and areas containing major mineral deposits, including those in short supply.

(3)... outdoor space for outdoor recreation, including but not limited to, areas of outstanding scenic historic and cultural value; areas particularly suited for park and recreation purposes, including access to lakeshores, beaches, and rivers and streams; and areas which serve as links between major recreation and open-space reservations, including utility easements, banks of rivers and streams, trails, and scenic highway corridors. ... (Government Code Section 65560.(b))”

Public health and safety issues relating to hazardous or special conditions such as earthquake fault zones, unstable soil areas, flood plains, watersheds, and areas presenting high fire risks are addressed in the Public Safety Element of the Growth Management section. Air and water quality protection and enhancement are addressed in the Conservation Element.

Each subsection in this Element lists goals, policies and recommendations for implementation. Goals describe a desired state of affairs for the future. They are broad public purposes toward which policies and programs are directed. Policies are statements of government intent against which individual actions on decisions are evaluated. Recommendations for implementation propose specific actions which Riverside may choose to take in achieving the goals of the General Plan.

6. Open Space

The preservation of open space serves the following important public objectives:

- natural resource and habitat preservation;
- managed utilization of natural resources;
- outdoor recreation;



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- creation of linkages between major recreation and open space and habitat areas;
- creation of buffers between urban areas and between urban and agricultural areas;
- protection of the public health, safety and welfare; and
- creation of an overall high quality ambiance for the community.

The recreation and open space system should be designed to reflect the desires of the people of Riverside, to be imaginative in projecting what might be, and to be realistic in recognizing what is possible.

Both the State of California and the City of Riverside have a long tradition of open space preservation. The State provides for open space by mandating comprehensive planning for open space by local governments, and by granting express authority for open space implementation and financing mechanisms, including open space maintenance districts, open-space easements and mandatory dedications/in-lieu fees for parks and recreational open space. The City's wealth of parks and open space areas evidence the high value it places on open space.

There are six major open space areas within the City that are designated as park land. These are the Santa Ana River Corridor, Box Springs Mountain Regional Park, Sycamore Canyon Park, Fairmount Park, Mt. Rubidoux Park and California Citrus State Historic Park. Lake Evans, Lake Mathews and Mockingbird Canyon Reservoir are major water features in or near the General Plan Area which are aesthetically significant but of varying potential for active recreational use.

Major open space linkages, designed to connect activity centers within the City, include the arroyo systems, the golf courses, Springbrook Wash, Gage Canal, Victoria Avenue and the Santa Ana River. A comprehensive trail network covering the entire General Plan Area is also anticipated. Exhibit 52 (Streets and Highways Diagram, *Located in the Map Pocket of this Document*) illustrates scenic boulevards and roadways in urban and rural areas that provide important linkages between and views of Riverside's open spaces.

Key Open Space Issues

Identification of Needs. What kind of open space system is required to meet the present and future needs of Riverside citizens? Planning for this system requires a carefully structured strategy which is long-range in nature, but sufficiently flexible to respond to new ideas and unanticipated opportunities. This requires not only careful selection of numerical level of service standards, but also a detailed evaluation of locational and design needs.



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Funding Mechanisms. What funding mechanisms and priority systems should the City use for open space? The limited availability of funds for public services and facilities requires the full and efficient use of available resources and creative approaches to financing. Funding alternatives must be identified that accommodate existing needs while expanding resources for new growth and development. Capital improvement funds must be carefully targeted as part of a long-range strategy that establishes a clear linkage between initial capital investments, maintenance and management of the open space ecosystems.

Open Space Design and Management. How should the City's open space resources be developed, administered and managed? The City's open space strategy must combine both park acquisition and natural resource preservation. The tasks of operating and maintaining parks and open space requires a sensitivity to the complexity of the overall system with emphasis on accountability and clear direction. In addition, there is a need to encourage innovation and public entrepreneurial approaches to problem solving.

Regional Coordination. How can the City coordinate the provision of park and open space facilities with other public and private entities within the Region? The provision of parks by private developers and other state and local governments presents an opportunity to consolidate overlapping functions to improve operational efficiency and effective service delivery.

Community Character. Riverside has existing natural open space assets that can be planned and managed in a manner which could enhance the City's character for decades to come in a very significant way. Capitalizing on these spaces is a major theme of the "*Quality City*."

Open Space Goals and Policies

Goal OS 1 To create a system of open space areas and linkages throughout the General Plan Area that protects the natural and visual character of the community and provides for appropriate active and passive recreational uses.

Policy OS 1.1 Exhibits 12 (Page III - 18) and 52 (Streets and Highways Diagram, *Located in the Map Pocket of this Document*) identify the location of open space areas and scenic roadways for the City of Riverside. These maps shall be used by the City as guides in preserving and protecting unique and important open space areas and shall be revised periodically to reflect changes in the City's open space areas.

Policy OS 1.2 The City shall consider additions to its planned open space system by evaluating the areas' ability to contribute to the preservation of natural resources, the managed production of



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natural resources, the provision of outdoor recreational opportunities, the creation of links between major recreation and open space areas, the creation of boundaries or “edges” between urban areas, and the general protection of the public health, safety and welfare.

- Policy OS 1.3* The General Plan’s Open Space Element shall be used as a basic reference in the preparation of environmental documents for projects reviewed by the City of Riverside.
- Policy OS 1.4* The City shall pursue action programs in cooperation with Federal, State, Regional, County and Special District programs to implement Open Space Element goals and policies.
- Policy OS 1.5* The City should utilize a combination of regulatory and acquisition approaches in its strategy for open space preservation.
- Policy OS 1.6* The City should establish an open space acquisition program that identifies acquisition area priorities based on capital costs, operation and maintenance costs, accessibility, needs, resource preservation, ability to complete or enhance the existing open space linkage system and unique environmental features.
- Policy OS 1.7* The City should develop a program for City acquisition of identified open space land and shall encourage land donations or the dedication of land in lieu of park fees for the acquisition of usable land for public parks, open space, and trail linkages.
- Policy OS 1.8* The City should ensure that areas acquired as part of the Open Space System are developed, operated and maintained to provide the City with a permanent, publicly accessible open space system.
- Policy OS 1.9* Capital Improvement Program projects which affect identified open space areas shall be designed to support these areas’ value as open space.
- Policy OS 1.10* The City should establish an on-going needs assessment program to solicit feedback for users to identify changing needs and standards for the Open Space system.



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Policy OS 1.11 The City should recognize the value of major institutional passive open spaces, particularly cemeteries, as important components of the total open space system and protect their visual character.

Recommendations for Implementation - Open Space (OS)

- I-OS 1:* Develop a system for prioritizing the acquisition and improvement of open space based on capital costs, operation and maintenance costs, accessibility, needs, resource preservation, ability to complete or enhance the existing open space system and unique environmental features.
- I-OS 2:* Prepare and periodically update an open space acquisition and improvement plan. This plan should 1) identify and prioritize projected open space acquisition and improvement expenditures; 2) identify proposed funding sources, capital, operations and maintenance.
- I-OS 3:* Acquire proposed open space areas identified in the open space acquisition and improvement plan using the most efficient mechanism that will ensure the land's continuous use as open space. The City should consider the effectiveness of dedications, fee simple purchase, purchase of development rights, transfers of development rights and any other mechanism for securing open space.

7. *Agricultural Preservation*

Citriculture was the mainstay of the City's economic growth for many years, and continues in substantial areas of the City. As discussed in "*Context for Planning*," farmland may be classified as prime farmland, farmland of statewide importance, unique farmland and farmland of local importance (see Exhibit 10 (Page III - 15)). This classification system is heavily dependent on recent or current usage of land for farming. A change in production over time changes the classification of the land. Current land use, production history, parcel size, soil suitability and location also contribute to the potential agricultural significance of any particular parcel. The General Plan considers these additional factors in identifying land which may not have been in agricultural production recently, but may have good soil characteristics and could be put to agricultural use with proper incentives (see Exhibit 11 (Page III - 16)). The General Plan also recognizes that some land presently in agricultural use may not be suitable for long-term preservation of this use because of relatively small parcel sizes, isolation from large blocks of other viable agricultural land, or association with developing planned communities. Examples of such transitional use areas include the southwest corner of Chicago and Pennsylvania Avenues, the Horace Street/Hawarden Drive area, the Orangecrest Community and portions of the Highgrove area.



The protection of agricultural land is strongly supported by the City of Riverside. This chapter of the General Plan recognizes this goal and recommends policies and implementation measures to accomplish it, including designation of planned land uses, application of development regulations, and creation of programs to assist farmers in maintaining agricultural operations, to minimize the impacts on agricultural operations from nearby urban development, and to provide financial support for agriculture.

Key Agricultural Preservation Issues

Identification of Viable Agricultural Land. Areas which are appropriate for long-term agricultural use should be identified through a review of existing land use, soil types, parcel sizes and compatibility with adjacent land uses. City plans and regulations should assist in maintaining these uses.

Protection from Urban Encroachment. Care needs to be taken to provide compatible land uses around planned agricultural areas and to limit the intrusion of inappropriate infrastructure (i.e. major urban utility lines or roadways) as much as possible.

Proactive Support of Agriculture. Policies and programs are needed to encourage and assist in the retention of agriculture as an economically supportable land use in designated areas.

Agricultural Preservation Goals and Policies

Goal A 1 To preserve designated agricultural lands in recognition of their economic, historic and open space benefits and their importance to the character of the City of Riverside.

Policy A 1.1 The Land Use Diagram (*Located in the Map Pocket of this Document*) designates agricultural lands that merit preservation based on their existing or planned use, soil types, parcel sizes and proximity to similar lands. The Plan's Land Use Element, other City regulations and agricultural preservation programs should be used to protect these designated agricultural lands from urban development.

Policy A 1.2 The City shall promote and encourage agriculture as an important industry and as a desirable open space use shaping the character of the entire City and of areas such as Arlington Heights, Woodcrest, Highgrove, Arlanza/La Sierra, and Rancho El Sobrante.

Policy A 1.3 The Land Use Diagram (*Located in the Map Pocket of this Document*) should identify land for retention and encouragement of agricultural use based on consideration of historic



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use, soil suitability, agricultural significance, prevailing parcel sizes and geographical associations.

- Policy A 1.4* The City shall recognize Agricultural Conservation Areas adopted by Riverside County in planning for future development and possible annexation of areas within the City's Sphere of Influence.
- Policy A 1.5* The City shall protect valuable agricultural land from urban development through the use of agricultural zoning districts and other appropriate development regulations, as well as financial and tax incentives.
- Policy A 1.6* The City shall encourage property owners to preserve citrus groves and shall implement public programs to provide incentives and other assistance to promote and protect citrus farming on prime agricultural lands.
- Policy A 1.7* The City shall consider strategies to enhance the productivity of the local agricultural industry, such as the creation of special electric and water rate structures and the establishment of an interest subsidy program for loans used for fencing, screening and replanting of agricultural lands.
- Policy A 1.8* The City should divert no further Gage Canal water permanently from agricultural use unless water from alternate sources of acceptable quality, quantity and cost can be provided. The temporary diversion of Gage Canal water should be permitted but only when not needed for agricultural purposes on any land designated for agricultural use within the historic service area of the Gage Canal. The City should explore the possibility of using or exchanging treated wastewater or other non-potable sources of water for agricultural purposes. Further, the City should seek to restore water of adequate quality, quantity and cost for agricultural purposes to properties designated for agricultural use but no longer entitled to service by the Gage Canal.
- Policy A 1.9* The City should establish appropriate public service and infrastructure standards to adequately serve agricultural areas. These standards shall be used in the planning, design, construction and operation of City facilities in areas planned for agriculture use. Other urban level services and facilities, such as wastewater collectors, should not be extended to these areas.



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- Policy A 1.10* The City shall coordinate its programs for public acquisition and development of areas for outdoor recreational activity with its efforts to protect land for agricultural use, so the impacts of recreation on agriculture can be minimized and the benefits to the City's open space character can be maximized. Recreational use of land should not interfere with the practice of agriculture and agricultural open space should be recognized as having important passive aesthetic value.
- Policy A 1.11* The City should establish buffers and/or open space between agricultural and urban uses so that negative impacts from urban development, such as automobile emissions, can be mitigated.
- Policy A 1.12* The City shall evaluate various proactive programs for agricultural preservation such as Transfer of Development Rights (TDRs), Purchase Lease Back, University Purchase for Research and Purchase of Development Rights (PDRs) .
- Policy A 1.13* The City shall coordinate its programs to preserve agricultural lands with those of other public, private and non-profit entities organized for this purpose.
- Policy A 1.14* The City shall support alternative allowable uses, such as crop diversification, within historic citriculture areas, where such uses will retain the agricultural use and character of the areas.

Recommendations for Implementation - Agriculture Preservation (A)

- I-A 1:* Continue to use zoning powers to protect valuable agricultural lands identified in the Land Use Diagram (*Located in the Map Pocket of this Document*).
- I-A 2:* Offer incentives for the conservation of valuable agricultural lands identified in the Land Use Diagram (*Located in the Map Pocket of this Document*).
- I-A 3:* Continue to refine water and electrical rate structures to improve the viability of agricultural uses.
- I-A 4:* Refine the interest subsidy program for the fencing, screening and replanting of agricultural lands.



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- I-A 5:* Study the potential for using treated effluent to irrigate agricultural lands.
- I-A 6:* Promote the local citrus industry and citrus related tourism through (a) the development of a tourism marketing plan that incorporates all existing and potential citrus heritage tourism sites and (b) coordination of a major multi-event, multi-cultural citrus festival geared to attracting large numbers of visitors to Riverside and the promotion of citrus products.
- I-A 7:* Allocate funds to provide low interest loans for the planting or replanting of citrus groves on agricultural sites of at least five gross acres of arable land.

